



LG MULTI X™ Solar Modules

LG245R1C / LG240R1C / LG235R1C

LG Electronics, Inc. (Korea Exchange: 06657.KS) is one of the globally leading companies and technology innovator for electronics, information and communication products. The LG Group currently employs more than 93,000 people worldwide in 120 companies. In fiscal year 2010 a turnover of 48.2 billion USD has been achieved.

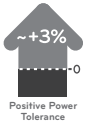
LG is one of the world's largest manufacturers of mobile phones, flat screen TVs, air conditioners, washing machines and refrigerators. As a future-oriented company, LG relies on the technology of renewable energies and is expanding it. The range of products comprises high quality solar cells, solar modules and solar solutions which are being manufactured in LG's leading production site Korea.

Multi X™ are multicrystalline solar modules with very high power.



LG Solar Cell Technology

With many years of devoted and thorough research and development LG has successfully developed a solar cell that is cutting edge and reliable.



Positive Power Tolerance

LG delivers solar modules with a rigorous quality assurance and a positive nominal power tolerance starting at 0%.



Outstanding Durability

LG solar modules withstand a maximum load of 5400 Pa, are light in weight and built with glass that is slim and durable.



Special Frame Design

LG solar modules are specially designed and drain water in all slopes and angles.



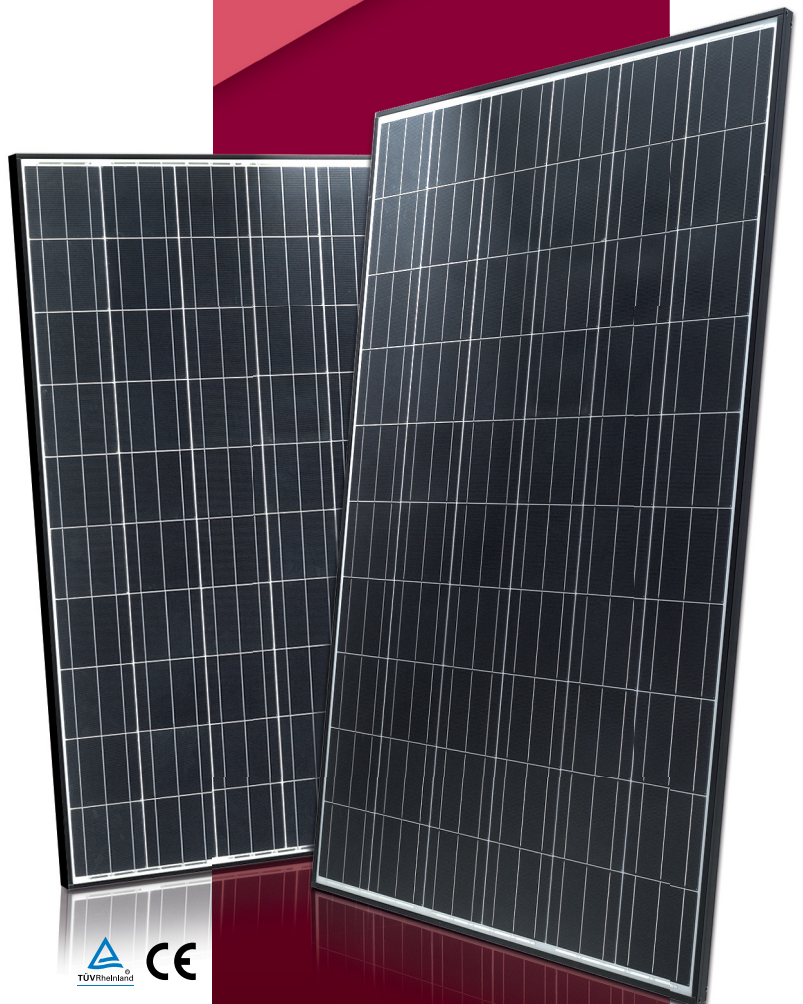
Warranty

LG offers a product warranty of 10 years that comprises of a power warranty of 90% up to 12 years and 80% up to 25 years.



Certified Laboratory

LG solar modules meet the requested specifications for solar modules. The test laboratory is certified by TÜV Rheinland and Underwriters Laboratories.



LG MULTITM Solar Modules

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Mechanical Properties

| | |
|---------------------------|-----------------------------------|
| Solar Cells | 6 × 10 |
| Solar Cells, Manufacturer | LG |
| Solar Cells, Type | multicrystalline |
| Solar Cells, Dimensions | 156 × 156 mm ² |
| Solar Cells, Busbars | 3 |
| Front Cover | Glass, 3.2 mm |
| Frame | Aluminum, anodized |
| Dimensions (L × W × H) | 1632 × 986 × 42 (mm) |
| Maximum Load | 5400 Pa |
| Weight | 19 kg |
| Connector, Type | Yukita, IP 67 |
| Junction Box | Yukita with 3 Bypass Diodes, IP65 |
| Length of Cables | 2 × 1000 mm |

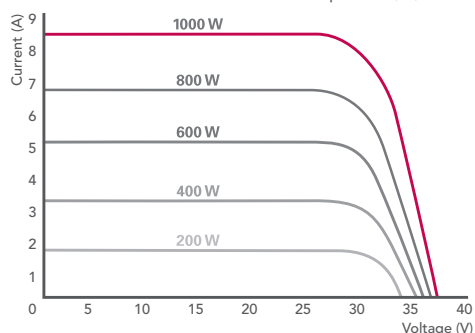
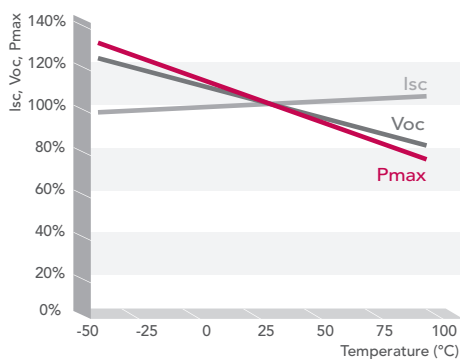
Certifications & Warranty

| | |
|------------------------------------|--|
| Certifications | IEC 61215, IEC 61730-1/-2 IEC 61701, IEC 62716/Draft C, ISO 9001 |
| Product Warranty | 10 years |
| Power Warranty of P _{max} | 12 years: 90%, 25 years: 80% |

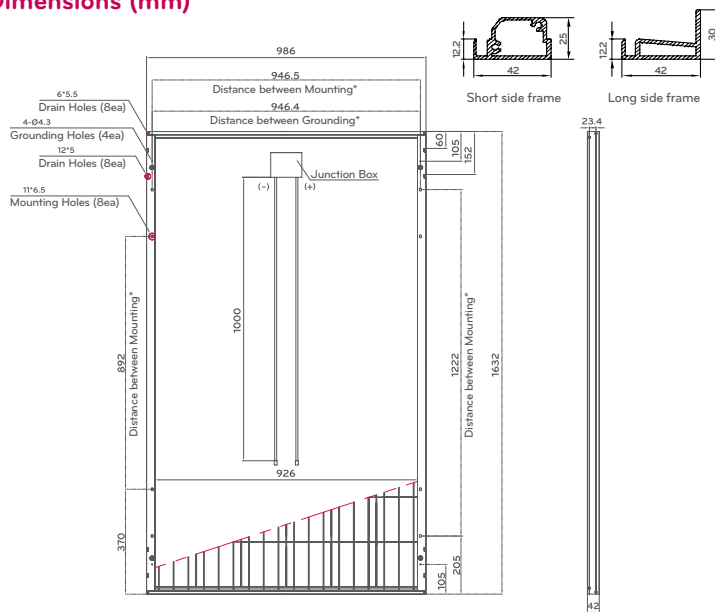
Temperature Coefficients

| | |
|------------------|-----------------------|
| NOCT | 45.7 ± 2 °C |
| P _{mpp} | -0.447%/K |
| V _{oc} | -0.125 V/K, -0.340%/K |
| I _{sc} | 4.96 mA/K, 0.060%/K |

Characteristic Curves



Dimensions (mm)



* The distance between the center of the mounting/grounding holes



Electrical Properties (STC*)

| | LG245R1C | LG240R1C | LG235R1C |
|--|-----------------|----------|----------|
| Maximum Power at STC (P _{max}) | 245 | 240 | 235 |
| Power Tolerance | 0 ~ +3% | | |
| Maximum System Voltage | 1000 V | | |
| Nominal Series Fuse Current | 15 A | | |
| Operating Temperature | -40 °C ~ +90 °C | | |
| MPP Voltage (V _{mpp}) | 30,4 | 30,0 | 29,5 |
| MPP Current (I _{mpp}) | 8,06 | 8,02 | 7,97 |
| Open Circuit Voltage (V _{oc}) | 37,5 | 37,2 | 36,9 |
| Short Circuit Current (I _{sc}) | 8,74 | 8,61 | 8,48 |
| Module Efficiency (%) | 15,2 | 14,9 | 14,6 |

* STC (Standard Test Conditions): Irradiance 1000 W/m², Module Temperature 25 °C, AM 1,5
Application Class: A (after IEC 61730), Safety Class: II
LG Electronics does not assume any warranty for the precision of the electric data.
Subject to change without notice.

Electrical Properties (NOCT*)

| | LG245R1C | LG240R1C | LG235R1C |
|---|----------|----------|----------|
| Maximum Power (W) | 178 | 174 | 170 |
| Maximum Power Voltage (V) | 27,15 | 26,75 | 26,25 |
| Maximum Power Current (A) | 6,54 | 6,51 | 6,47 |
| Open Circuit Voltage (V _{oc}) | 34,61 | 34,31 | 34,01 |
| Short Circuit Current (I _{sc}) | 7,09 | 6,99 | 6,89 |
| Efficiency Reduction (from 1000 W/m ² to 200 W/m ²) | < 4.5% | | |

* NOCT (Nominal Operating Cell Temperature): Irradiance 800 W/m², Ambient Temperature 20 °C, Wind Speed 1 m/s



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